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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,265	03/31/2006	Mitsuteru Mutsuda	2224-0255PUS1	9018

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EXAMINER

FREEMAN, JOHN D

ART UNIT	PAPER NUMBER
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1787

NOTIFICATION DATE	DELIVERY MODE
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11/19/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/574,265	Applicant(s) MUTSUDA ET AL.	
	Examiner John Freeman	Art Unit 1787	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-14,19 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) 22-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-14 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8 July 2010 has been entered.

Claim Rejections - 35 USC § 102

2. Claims 1, 4-6, 8-14, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Ikuta et al. (US 2003/0118839).

3. Regarding claim 1:

4. Ikuta discloses a composite comprising a thermoplastic resin part bonded to a rubber part [0001]. The thermoplastic part includes polyamide resins [0036].

5. Corresponding to presently claimed non-urethane resin (Ib-1), the polyamide resin includes alicyclic polyamides [0040]. The terminal groups can be up to 100% amino groups [0044]. The examiner submits the resin taught by Ikuta intrinsically has a terminal amino group concentration greater than 15 mmol/kg as presently claimed because 100% of the terminal ends can be amino groups and the polymer is otherwise the same as presently claimed.

6. Corresponding to presently claimed non-urethane resin (Ib-2), the thermoplastic polyamide resin can include a vulcanization auxiliary, which includes an oligomer polyamide having a number-average molecular weight of up to 1000 [0108].

7. The rubber part includes urethane-based rubbers [0081]. Such urethane rubbers include polyester-based urethane elastomers and polyether-based urethane elastomers [0086]. Ikuta discloses such elastomers are thermoplastic [0067].

8. Regarding claims 4-6:

9. The alicyclic polyamide resin includes an aliphatic and alicyclic diamine component [0040].

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10. Regarding claims 8 and 13:

11. The thermoplastic can include the oligomer as previously explained, thus meeting the requirement of presently disclosed (Ib-2).

12. Regarding claim 9:

13. Given that Ikuta teaches the polyamide resin contains 100% terminal amino groups, and further teaches the vulcanization-auxiliary polyamide oligomer is made from the same material, Ikuta teaches the polyamide oligomer contains 100% terminal amino groups. That is, Ikuta teaches the oligomer has a plurality of primary amino groups in each molecule.

14. Regarding claims 10-11:

15. Ikuta teaches the polyamide oligomer should contain not less than 2 active hydrogen atoms, i.e., amino groups, per molecule. The examiner takes the position that Ikuta's oligomer inherently satisfies the presently claimed amino-group concentration because it is otherwise the same oligomer as presently claimed.

16. Regarding claim 12:

17. The polyamide oligomer comprises 0.5-20 pbw compared to 100 pbw of the resin [0110].

18. Regarding claim 14:

19. The rubber part includes polyester-based urethane elastomers and polyether-based urethane elastomers [0086].

20. Regarding claim 19:

21. There is no disclosure in Ikuta that the composite is for a shoe or roll. However, the recitation in the claims that the molded composite is "a shoe member or a roll member" is merely an intended use. Applicants attention is drawn to MPEP 2111.02 which states that intended use statements must be evaluated to determine whether the intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

22. It is the examiner's position that the preamble does not state any distinct definition of any of the claimed invention's limitations and further that the purpose or intended use, i.e. a composite used in a

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shoe or roll member, recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art and further that the prior art structure which is a composite identical to that set forth in the present claims is capable of performing the recited purpose or intended use.

Claim Rejections - 35 USC § 103

23. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ikuta et al. (US 2003/0118839).

24. Ikuta discloses a composite comprising a thermoplastic resin part bonded to a rubber part as previously explained.

25. Ikuta is silent with regard to the ratio of aliphatic component to alicyclic component.

26. The polyamide can be the result of reacting an aliphatic dicarboxylic acid and an alicyclic diamine [0040]. Therefore, when faced with a mixture, one of ordinary skill in the art would be motivated by common sense to select a 1:1 ratio, a ratio that falls within the presently claimed amount, absent evidence of unexpected or surprising results. Case law holds that "[h]aving established that this knowledge was in the art, the examiner could then properly rely... on a conclusion of obviousness, 'from common knowledge and common sense of the person of ordinary skill in the art within any specific hint or suggestion in a particular reference.'" *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

Claim Rejections - 35 USC § 112

27. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

28. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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29. Claim 1 recites (Ib-1) is a "polyamide-series resin." It is not clear how the term "series" modifies the polymer identity, or what is encompassed by the modified terms. The examiner respectfully suggests Applicant deletes the word "series" from the phrase to clarify the scope of the claims.

30. Claim 11 recites the amino group-containing compound of (Ib-2) "is a polyamide oligomer" with a given amino group concentration. As claim 1 already narrowly defines the compound as being a "polyamide oligomer," the examiner requests Applicant deletes "is a polyamide oligomer" from claim 11 to improve the clarity and readability of the claim.

Response to Arguments

31. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

32. The examiner appreciates Applicant's efforts to improve the clarity of the present claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Freeman whose telephone number is (571)270-3469. The examiner can normally be reached on Monday-Friday 9:00-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571)272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Freeman
Examiner
Art Unit 1787

/John Freeman/
Examiner, Art Unit 1787

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1787